GFE Job Sheet 5: Editing Grids in the Spatial Editor - Edit Tools

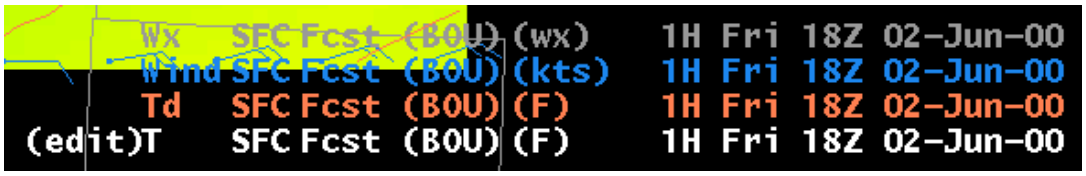
Objective

This job sheet will familiarize the user on how to use the various editing tools of GFE. These tools will be used in the Spatial Editor environment.

Procedures

A. Toggle a Grid to Edit Mode.

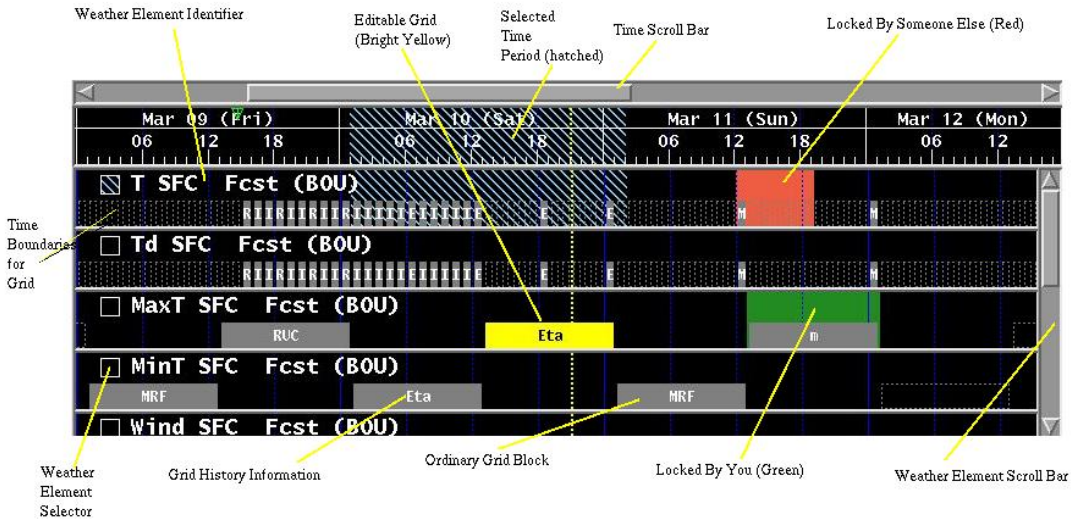
1. Make the weather element visible by clicking the *left mouse button* on the desired weather element in the Spatial Editor *Legend*.



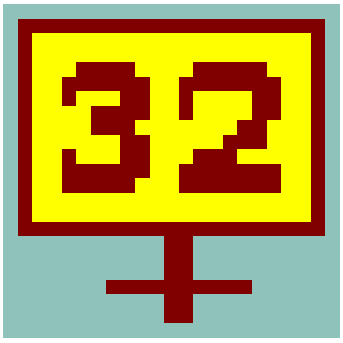
2. Click both mouse buttons on the desired weather element to toggle it to edit mode. You should see the phrase *edit* appear to the left of the desired weather element.

OR

1. Locate the desired weather element grid in the Grid Manager and click the left mouse button on the grid block. The *edit* phrase will appear next to that weather element in the Spacial Editor.



B. Sample Tool.



Purpose: The Sample Tool allows you to create a point on the Spatial Editor that will display a text representation of the gridded value under the cursor.

1. Make sure that a weather element is editable (visible) on the Spatial Editor.

2. Click the *Sample Tool* icon on the *button bar*.

3. Move the cursor into the Spatial Editor and then left click the mouse button over a desired point of interest.

4. A text or numerical value will be displayed on the Spatial Editor.

5. If you select additional weather elements (from the legend or Grid Manager), the sample points will display values for those weather elements.

6. To delete individual sample points, click both mouse buttons over the sample point symbol (plus symbol +) located on the Spatial Editor.

7. To delete all sample points at once, choose *Maps* on the main menu, select *Samples* and then *Clear*.

C. Loading Sample Points

1. Select *Maps* from the top of the menu bar:

2. Select *Samples* and then *Load.*

3. A Load Sample Set box will pop up. Select the desired Sample Set (i.e. Test_sample).

4. Click *Add*.

D. Adding a Map Background

1. Select *Maps* from the top menu bar.

2. Select *Cities_vef* and notice that city names are displayed in the spatial editor. *Toggle Cities_vef off* again.

E. Adding Topography

1. Select *Maps* from the top menu bar.

2. Select *Topography* from the pull down menu. You might have to toggle off the temperature element from the Spatial Editor Legend to see the topography clearly.

F. Zooming the Display

1. *Right click* anywhere within the spacial editor.

2. Select *Zoom to* and a desired value to zoom in or out.

OR

1. While holding down the *SHIFT* key, click on the *left mouse button* to zoom out, or click *both buttons* to zoom in. **NOTE: Clicking both mouse buttons is the same as clicking the middle mouse button on a three button mouse.**

G. Panning the Display

1. While holding down the shift key and the left mouse button, drag the image as desired.

H. Contour Tool - Draw a New Contour (only for scalar fields).

Purpose: The Contour Tool allows you to modify gridded values by adding, deleting and adjusting contours.

1. While in Edit Mode for the desired weather element (T, Td, MaxT or MinT recommended), select the *Contour Tool* from the *button bar*. To gain the best results, select *Delete All Contours* from the Spatial Editor by using the right mouse button.

2. Pick a value from the *Color Bar* by clicking the left mouse mouse button on the desired value. You can also select a value by dragging the mouse pointer across the color bar while holding the left mouse button. The value you select is called a *Pickup Value*. You can also select a Pickup Value by right clicking in the color bar and selecting *Set Pickup Value* from the pop-up menu. This will present you with a separate window in which you can manually choose a Pickup Value. Click *Dismiss* to close the window. Do not pick a value at this time with this method.

3. Move the cursor over the spatial editor and draw a contour starting and finishing beyond the edge of the editable image.

4. Repeat steps 2 and 3 drawing several more contours each with a different Pickup Value.

5. Press the right mouse button anywhere within the Spatial Editor. Select *Calculate New Grid* from the pop-up menu.

6. A new grid should appear shortly that correlates with the new contours.

I. Adjusting A Contour.

1. While in Edit Mode for the desired weather element, select the *Contour Tool* from the *button bar*.

2. Move the cursor over a contour of interest.

3. Press and hold both mouse buttons and draw a new position for this contour. For the best results, make sure that you release the button over the same contour on which you started with (start and finish with the same contour).

4. Once the mouse buttons are released, the grid is recalculated and the new contour position is displayed.

J. Delete a Contour.

1. Move the cursor over a contour of interest.

2. Click both mouse buttons and the contour should disappear.

K. Add A Contour.

1. Move the cursor to a location between two contours.

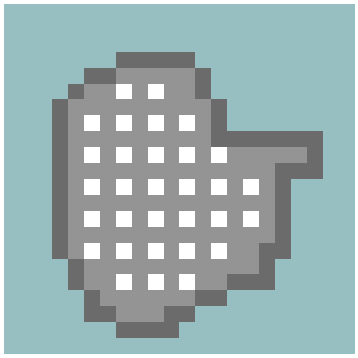
2. Click the *left mouse* button and a new contour should appear.

L. Undo Last Contour edit.

1. Right click on the Spatial Editor and select *Undo Last Contour Edit.*

2. This will reverse the last contour edit that you made.

M. Draw Edit Area Tool (also called the Select Points Tool).



Purpose: The Draw Edit Area Tool (Select Points Tool) allows you to define (draw) an edit area.

1. Select the *Draw Edit Area Tool* on the *button bar*.

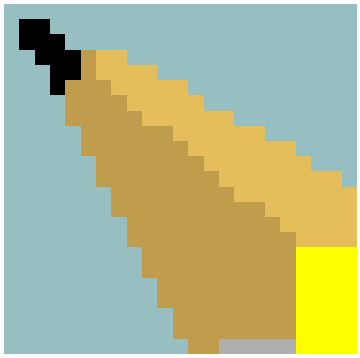
2. Press the *left mouse* button and draw a closed outline anywhere on the Spatial Editor (i.e. draw a circle). A white line will be displayed as the outline is being formed.

3. Release the *left mouse* button once the desired (closed) outline is created. A white shaded area will now be displayed indicating the new edit area that has been created.

4. To delete a portion of the edit area, draw another closed outline with *both* mouse buttons depressed which overlaps the portion of the original edit area that you want to delete.

5. To delete an edit area, move the mouse pointer over the edit area, *right click* and then select *Deselect Contiguous Area* from a pop-up menu. You can also use the *Clear Edit Area* button labeled “C” on the button bar.

N. Pencil Tool.



Purpose: To modify grid values by adjusting the position of contours.

1. While in Edit Mode for the desired weather element, select the *Pencil Tool* from the *button bar*.

2. Now press the *left mouse* button and *drag* the mouse pointer over the Spatial Editor. As you *drag* the mouse, a white line appears that defines the new position of the gridded contour.

3. Release the *left mouse* button when the desired change for the grid value is made.

4. Repeat this procedure to modify additional grid values.

5. Change the *Pencil Tool Influence* value by right clicking the mouse over the Spatial Editor. Select *Pencil Tool Influence,* then choose the desired value from the drop down menu. The *lower* the value, the *smaller* the area changed by the Pencil Tool. The *higher* the value, the *greater* the area changed by the Pencil Tool.

O. Pencil Tool - Editing Weather Element.

1. Make the Wx element editable in the Spatial Editor.

2. Select the *Pencil Tool*.

3. Find a contiguous area of weather, or create one if no weather is defined on the grid with the following steps:

    a. Select the *Draw Edit Area Tool* and create an edit area (i.e. draw a circle).

    B. Assign a *Pick Up Value* by placing the cursor over color bar on the top of the Spatial Editor, *right click*, select *Set To Common Values*, and choose any weather type.

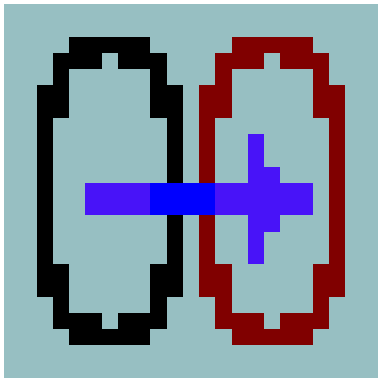
    C. Clear the edit area by clicking on the “C” icon on the button bar.

D. Re-select the *Pencil Tool* from the *button bar*.

4. Move the cursor inside this area (the area of weather) and *press* and *hold* the *left mouse* button.

5. Drag the cursor to define a new boundary for this weather area. Make sure that you begin and end in the same contiguous weather area in which you started. Release the left mouse button when the desired change is made.

P. Move / Copy Tool.



Purpose: The Move/Copy Tool allows you to move a defined area of data to a new location.

1. While in Edit Mode for the desired weather element, find a feature that you would like to copy or move.

2. Select the *Draw Edit Area Tool* from the *button bar* and create an edit area that identifies this feature.

3. Pick the *Move/Copy Tool* from the *button bar*.

4. Move the cursor over the edit area and then press and hold the left mouse button. This is the Copy function.

5. Drag this feature to some other desired location and then release the mouse button. The feature that you selected has been copied to the new location, leaving the original edit area unchanged.

6. To move a feature, place the cursor in the edit area and drag the edit area by depressing *both* mouse buttons. If this procedure is used, the original edit area changes with new interpolated grid values. This is the Move function.